



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20230
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/051,579

01/18/2002

Atsuhito Noda

A1-212 US

8662

23683

7590

01/13/2003

MOLEX INCORPORATED
2222 WELLINGTON COURT
LISLE, IL 60532

EXAMINER

LEON, EDWIN A

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 01/13/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/051,579

Applicant(s)

NODA, ATSUHITO

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2002.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 9 and 10 is/are allowed.
- 6) ☒ Claim(s) 1-8 and 11-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed November 5, 2002 in which the Specification and Claims 1-10 have been amended and new Claims 11-20 have been added, has been placed of record in the file as Paper No. 3.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 13-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 13 recites the limitation "said insulative housing" in Line 5 and Claim 16 recites the limitation "the cable" in Line 2. There is insufficient antecedent basis for these limitations in the claims. Also, regarding Claim 13, it is unclear if Applicant refers to the insulative resin or the receptacle's insulative housing. For examination purposes the Examiner will assume that Applicant is referring to the insulative resin since there is no mention in the Specification of any plug's insulative housing.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 13-15 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Beshears (U.S. Patent No. 6,079,986). With regard to Claim 13, Beshears discloses a coaxial plug (40) comprising: a plug main body (14,60) made of an insulative resin and having a surface (front surfaces of 14,60), and a plurality of pin type terminals (42,72,74) protruding from a surface (front surfaces of 14,60) of the plug main body (14,60), the pin type terminals (42,72,74) being divided into one signal terminal (42,72) and a plurality of ground terminals (74) disposed around the signal terminal (42,72), the signal terminal (42,72) being separated from the ground terminals (74) solely by the insulative resin. See Figs. 13-17.

With regard to Claim 14, Beshears discloses the ground terminals (74) being arranged such that distances between adjacent ground terminals (74) are set to be equal to one another. See Figs. 13-17.

With regard to Claim 15, Beshears discloses the ground terminals (74) being arranged such that distances from the signal terminal (42,72) to the ground terminals (74) are set to be equal to one another. See Figs. 13-17.

With regard to Claim 17, Beshears discloses two of the ground terminals (74) being provided, which are disposed to be point-symmetric with respect to the signal terminal (42,72). See Figs. 13-17.

With regard to Claim 18, Beshears discloses three of the ground terminals (74) being provided, which are disposed at respective apex positions of a regular triangle centered by the signal terminal (42,72). See Figs. 13-17.

With regard to Claim 19, Beshears discloses four of the ground terminals (74) being provided, which are disposed at respective corner portions of a regular square centered by the signal terminal (42,72). See Figs. 13-17.

With regard to Claim 20, Beshears discloses eight of the ground terminals (74) being provided, which are respectively disposed at corner portions of a regular square centered by the signal terminal (42,72) and at longitudinal middle points of sides of the regular square. See Figs. 13-17.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-8 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beshears (U.S. Patent No. 6,079,986) in view of Applicant's admitted prior art. With regard to Claims 1, 4 and 16, Beshears discloses a coaxial connector comprising a coaxial plug (40), the coaxial plug (40) includes a plug main body (14,60) made of an insulative resin, and having a surface (front surfaces of 14,60) and a plurality of terminals (42,72,74) protruding from the surface (front surfaces of 14,60) of the plug main body (14,60); and the terminals (42,72,74) are divided into one signal terminal (72,42) and a plurality of ground terminals (74) disposed around the signal terminal (72,42), the signal terminal (72,42) is disposed at a central portion of a planar surface (where 14 is located) to be protruded from the planar surface (where 14 is located), and the ground terminals (74) are disposed around the signal terminal (72,42), and a coaxial receptacle (14) electrically connected to the coaxial plug (40) by inserting the terminals (42,72,74) therein. See Figs. 13-17.

Beshears does not show the coaxial plug provided at an end of a cable.

Applicant's admitted prior art discloses the use of a coaxial plug at an end of a cable. See Page 1, Lines 4-21.

Thus, it would have been obvious to one with ordinary skill in the art at the time the invention was made to modify the coaxial connector of Beshears by connecting the plug to an end of a cable as taught in Applicant's admitted prior art to make the connector suitable for systems using coaxial cables.

With regard to Claim 2, Beshears discloses the ground terminals (74) being arranged such that distances between adjacent ground terminals (74) are set to be equal to one another. See Figs. 16-17.

With regard to Claim 3, Beshears discloses the ground terminals (74) being arranged such that distances from the signal terminal (72,42) to the ground terminals (74) are set to be equal to one another. See Figs. 16-17.

With regard to Claim 5, Beshears discloses two of the ground terminals (74) being provided, which are disposed to be point-symmetric with respect to the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 6, Beshears discloses three of the ground terminals (74) being provided, which are disposed at respective apex positions of a regular triangle centered by the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 7, Beshears discloses four of the ground terminals (74) being provided, which are disposed at respective corner portions of a regular square centered by the signal terminal (72,42). See Figs. 16-17.

With regard to Claim 8, Beshears discloses eight of the ground terminals (74) being provided, which are respectively disposed at corner portions of a regular square centered by the signal terminal (72,42) and at longitudinal middle points of sides of the regular square. See Figs. 16-17.

With regard to Claim 11, Beshears discloses the terminals (42,72,74) being perpendicular to the surface (front surfaces of 14,60). See Figs. 16-17.

Art Unit: 2833

With regard to Claim 12, Beshears discloses the terminals (42,72,74) being pin type. See Figs. 16-17.

Allowable Subject Matter

8. Claims 9-10 are allowed.

The references fail to teach, disclose, or suggest, either alone or in combination, the coaxial receptacle includes an insulative housing having a surface formed with a plurality of guide holes into which the signal terminal and the ground terminals are respectively inserted, and a plurality of contacts disposed within the guide holes of the insulative housing; the contacts includes a signal contact contacted with the signal terminal and ground contacts contacted with the ground terminals; and the surface of the insulative housing has a planar portion surface-contacted with the planar surface of the coaxial plug.

Response to Arguments

9. Applicant's arguments filed November 5, 2002 have been fully considered but they are not persuasive. In response to Applicant's arguments regarding Claim 1 that the Beshears reference doesn't show the coaxial receptacle configured for connection to an associated circuit board, it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate

Art Unit: 2833

the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations. *Ex. parte Masham*, 2 USPQ2d 1647 (1987).

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

In response to Applicant's argument that the Beshears reference includes additional structure (a cylindrical metal terminal) not required by Applicant's invention, it must be noted that reference clearly discloses the invention as claimed. The fact that it discloses additional structure not claimed is irrelevant.

In response to Applicant's arguments regarding Claims 12-13 that the Beshears reference doesn't show terminals 50 or 56 being pin type terminals, Applicant is reminded that neither terminals 50 nor terminals 56 were cited in the rejection. Applicant's attention is directed to Fig. 13 and Column 4, Lines 1-18 in which Beshears clearly discloses terminals (42,72,74) being pin type terminals.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2833

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Edwin A. Leon
AU 2833
EAL
December 31, 2002

P. Bradley
P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800